Docket No.: 10663-013001

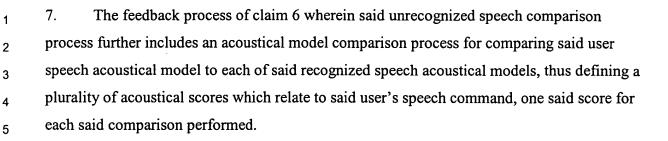
WHAT IS CLAIMED IS:

1	1.	A feedback process for providing feedback for unrecognized speech comprising	g:
2		a speech input process for receiving a speech command as spoken by a u	user;
3		and	
4		an unrecognized speech comparison process, responsive to said speech in	inpu

an unrecognized speech comparison process, responsive to said speech input process, for comparing said user's speech command to a plurality of recognized speech commands available in a speech library to determine if said user's speech command is unrecognized speech, as opposed to non-speech.

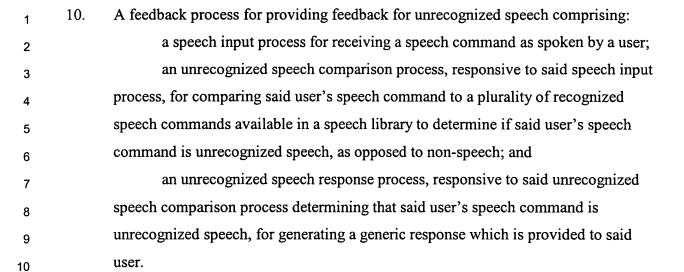
- 2. The feedback process of claim 1 further comprising an unrecognized speech response process, responsive to said unrecognized speech comparison process determining that said user's speech command is unrecognized speech, for generating a generic response which is provided to said user.
 - 3. The feedback process of claim 2 wherein said generic response is a visual response.
 - 4. The feedback process of claim 2 wherein said generic response is an audible response.
 - 5. The feedback process of claim 1 wherein said unrecognized speech comparison process includes a user speech modeling process for performing an acoustical analysis of said user's speech command and generating a user speech acoustical model for said user's speech command.
 - 6. The feedback process of claim 5 wherein said unrecognizable speech comparison process further includes a recognized speech modeling process for performing an acoustical analysis of each of said plurality of recognized speech commands and generating a recognized speech acoustical model for each said recognized speech command, thus generating a plurality of recognized speech acoustical models.

Docket No.: 10663-013001



- 8. The feedback process of claim 7 wherein said unrecognized speech comparison process further includes an unrecognized speech window process for defining an acceptable range of acoustical scores indicative of unrecognized speech, wherein said user's speech command is defined as unrecognized speech if the acoustical score, chosen from said plurality of acoustical scores, which indicates the highest level of acoustical match falls within said acceptable range of acoustical scores.
- 9. The feedback process of claim 7 wherein said plurality of recognized speech commands includes an unrecognized speech entry, said recognized speech modeling process further performs an acoustical analysis on said unrecognized speech entry to generate an unrecognized speech acoustical model for said unrecognized speech entry, and said acoustical model comparison process further compares said user speech acoustical model to said unrecognized speech acoustical model to define an unrecognized speech acoustical score; wherein said user's speech command is defined as unrecognized speech if said unrecognized speech acoustical score indicates a higher level of acoustical match than any of said plurality of acoustical scores.

1



- 11. The feedback process of claim 10 wherein said generic response is a visual response.
- 12. The feedback process of claim 10 wherein said generic response is an audible response.



13. A feedback process for providing feedback for unrecognized speech comprising: a speech input process for receiving a speech command as spoken by a user; and

an unrecognized speech comparison process, responsive to said speech input process, for comparing said user's speech command to a plurality of recognized speech commands available in a speech library to determine if said user's speech command is unrecognized speech, as opposed to non-speech;

wherein said unrecognized speech comparison process includes a user speech modeling process for performing an acoustical analysis of said user's speech command and generating a user speech acoustical model for said user's speech command;

wherein said unrecognized speech comparison process further includes a recognized speech modeling process for performing an acoustical analysis of each of said plurality of recognized speech commands and generating a recognized speech acoustical model for each said recognized speech command, thus generating a plurality of recognized speech acoustical models.

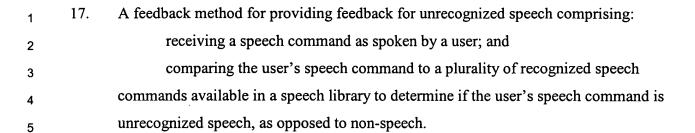
- 14. The feedback process of claim 13 wherein said unrecognized speech comparison process further includes an acoustical model comparison process for comparing said user speech acoustical model to each of said recognized speech acoustical models, thus defining a plurality of acoustical scores which relate to said user's speech command, one said score for each said comparison performed.
- 15. The feedback process of claim 14 wherein said unrecognized speech comparison process further includes an unrecognized speech window process for defining an acceptable range of acoustical scores indicative of unrecognized speech, wherein said user's speech command is defined as unrecognized speech if the acoustical score, chosen from said plurality of acoustical scores, which indicates the highest level of acoustical match falls within said acceptable range of acoustical scores.

Docket No.: 10663-013001



16. The feedback process of claim 14 wherein said plurality of recognized speech commands includes an unrecognized speech entry, said recognized speech modeling process further performs an acoustical analysis on said unrecognized speech entry to generate an unrecognized speech acoustical model for said unrecognized speech entry, and said acoustical model comparison process further compares said user speech acoustical model to said unrecognized speech acoustical model to define an unrecognized speech acoustical score; wherein said user's speech command is defined as unrecognized speech if said unrecognized speech acoustical score indicates a higher level of acoustical match than any of said plurality of acoustical scores.





- 18. The feedback method of claim 17 further comprising generating a generic response and providing it to the user if it is determined that the user's speech command is unrecognized speech.
 - 19. The feedback method of claim 17 wherein said comparing the user's speech command includes performing an acoustical analysis of the user's speech command and generating a user speech acoustical model for the user's speech command.
 - 20. The feedback method of claim 19 wherein said comparing the user's speech command further includes performing an acoustical analysis of each of the plurality of recognized speech commands and generating a recognized speech acoustical model for each recognized speech command, thus generating a plurality of recognized speech acoustical models.
 - 21. The feedback method of claim 20 wherein said comparing the user's speech command further includes comparing the user speech acoustical model to each of the recognized speech acoustical models, thus defining a plurality of acoustical scores which relate to the user's speech command, one score for each comparison performed.
 - 22. The feedback method of claim 21 wherein said comparing the user's speech command further includes defining an acceptable range of acoustical scores indicative of unrecognizable speech, wherein the user's speech command is defined as unrecognized

2

3

4

5

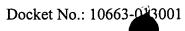
6

7

8

9

10



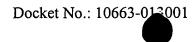


- speech if the acoustical score, chosen from the plurality of acoustical scores, which indicates the highest level of acoustical match falls within the acceptable range of acoustical scores.
 - 23. The feedback method of claim 21 wherein the plurality of recognized speech commands includes an unrecognized speech entry, wherein said comparing the user's speech command further includes:

performing an acoustical analysis on the unrecognized speech entry to generate an unrecognized speech acoustical model; and

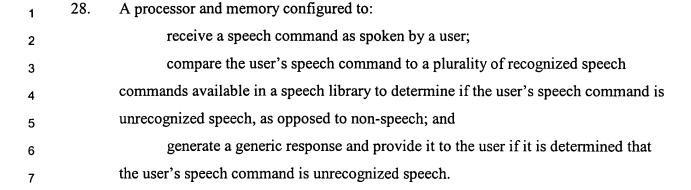
comparing the user speech acoustical model to the unrecognized speech acoustical model to define an unrecognized speech acoustical score;

wherein the user's speech command is defined as unrecognized speech if the unrecognized speech acoustical score indicates a higher level of acoustical match than any of the plurality of acoustical scores.



1	24. A computer program product residing on a computer readable medium having a	
2	plurality of instructions stored thereon which, when executed by the processor, cause that	
3	processor to:	
4	receive a speech command as spoken by a user;	
5	compare the user's speech command to a plurality of recognized speech	
6	commands available in a speech library to determine if the user's speech command i	
7	unrecognized speech, as opposed to non-speech; and	
8	generate a generic response and provide it to the user if it is determined that	
9	the user's speech command is unrecognized speech.	

- 25. The computer program product of claim 24 wherein said computer readable medium is a random access memory (RAM).
- 1 26. The computer program product of claim 24 wherein said computer readable medium 2 is a read only memory (ROM).
 - 27. The computer program product of claim 24 wherein said computer readable medium is a hard disk drive.



- 29. The processor and memory of claim 28 wherein said processor and memory are incorporated into a wireless communication device.
- 1 30. The processor and memory of claim 28 wherein said processor and memory are incorporated into a cellular phone.
- 1 31. The processor and memory of claim 28 wherein said processor and memory are incorporated into a personal digital assistant.
 - 32. The processor and memory of claim 28 wherein said processor and memory are incorporated into a palmtop computer.
- 1 33. The processor and memory of claim 28 wherein said processor and memory are incorporated into a child's toy.